UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/891,523	06/27/2001	Ryan N. Rakvic	2207/1123601	3187

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EXAMINER
INOA, MIDYS

ART UNIT	PAPER NUMBER
2188	

DATE MAILED: 12/23/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 11/29/2004 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE. Therefore, further action by the applicant is required to avoid abandonment of this application. A proper reply to a final rejection under 37 CFR 1.113 may <u>only</u> be either: (1) a timely filed amendment which places the application in condition for allowance; (2) a timely filed Notice of Appeal (with appeal fee); or (3) a timely filed Request for Continued Examination (RCE) in compliance with 37 CFR 1.114.

<u>PERIOD FOR REPLY</u> [check either a) or b)]

a) ☒ The period for reply expires <u>3</u> months from the mailing date of the final rejection.

b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection. ONLY CHECK THIS BOX WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

1. ☐ A Notice of Appeal was filed on _____. Appellant's Brief must be filed within the period set forth in 37 CFR 1.192(a), or any extension thereof (37 CFR 1.191(d)), to avoid dismissal of the appeal.

2. ☒ The proposed amendment(s) will not be entered because:

    (a) ☐ they raise new issues that would require further consideration and/or search (see NOTE below);

    (b) ☐ they raise the issue of new matter (see Note below);

    (c) ☐ they are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or

    (d) ☒ they present additional claims without canceling a corresponding number of finally rejected claims.

    NOTE: _____.

3. ☐ Applicant's reply has overcome the following rejection(s): _____.

4. ☐ Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).

5. ☒ The a)☐ affidavit, b)☐ exhibit, or c)☒ request for reconsideration has been considered but does NOT place the application in condition for allowance because: *See Continuation Sheet.*

6. ☐ The affidavit or exhibit will NOT be considered because it is not directed SOLELY to issues which were newly raised by the Examiner in the final rejection.

7. ☒ For purposes of Appeal, the proposed amendment(s) a)☒ will not be entered or b)☐ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.

    The status of the claim(s) is (or will be) as follows:

    Claim(s) allowed: _____.

    Claim(s) objected to: *11 and 13*.

    Claim(s) rejected: *9, 10, 12, 14-18, 20-23, 26-28, 30-33*.

    Claim(s) withdrawn from consideration: _____.

8. ☐ The drawing correction filed on _____ is a)☐ approved or b)☐ disapproved by the Examiner.

9. ☐ Note the attached Information Disclosure Statement(s)(PTO-1449) Paper No(s). _____.

10. ☐ Other: _____

Continuation of 5. does NOT place the application in condition for allowance because: Applican't arguments are not persuasive. Applicant argues that Rappoport does not teach reassigning remaining conflicting cachelet pointers to unused cachelets. However, Rappoport teaches deferring the remaining data request with the conflicting cachelet pointer; where in deferring the request, the request is being reassigned to the same cachelet which at the time of reasignment is not in use (thus an unused cachelets). The act of deferring the request has the effect of allowing the access to take place once the cachelet is no longer in use.

Applicant argues that the anticipation rejection of Claim 30 with Rappoport does not teach forwarding the reasigned data requests in parallel with other data requests because Rappaport does not teach reasigning the data requests and so, it can not be modified to perform this in parallel. However, as explanined above, in the act of deffering the request, the request is being reassigned to the same cachelet which is at that point not in use: Rappoport et al. does not teach forwarding the defferred data requests in parallel with the other data requests. It would have been obvious to one of ordinary skill in the art at the time the invention was made to allow the invention of Rappoport et al. to forward defferred commands in parallel to other commands since the system already has the ability to address the memory banks independently from one another during the same clock cycle (in other words, it has the ability to address memory banks in parallel) and extending this parallel ability to the defferred requests would allow for these requests to be processed faster and more efficiently. Since the act of deferring performs the action of reasigning the request to the same cachelet once the cachelet is no longer busy, in modifying the system to perform this in parallel; the system of Rappoport reads on Claim 30.

Regarding Claims 20 and 22, Applicant argues that Rappoport does not teach a load that misses the cachelet to which it was assigned or a second layer of cache to receive a load that misses the cachelet to which it was asigned. The system of Rappoport has a first layer of cache (cache memory 230, Figure 2) with cachelets (banks 310, Figure 3) and means for distributing multiple loads among the cachelets in a single clock cycle ("retrieve data in a single clock cycle", Column 5, lines 27-30), and a second layer of cache (segment cache 280, Figure 2) which receives load that misses the cachelet to which it was assigned in that since data is supplied by either the instruction cache or the segment cache (Column 3, lines 4-37) and the selector 290 selects the output from either cache when the first cache memory layer cannot supply the data and thus the load has missed a cachelett within this cache, the second segment cache (second cache layer) memory layer must receive the missed request. The Authoritative Dictionary discloses an instance in which in disk caching, a hit occurs when the targeted data is located in a first level of cache storage, and thus there is no need to reference secondary storage. However, when the targeted data is not present, secondary storage must be referenced (Page 519),

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